

FLEX 330/400/500 XMS - XMI

Technical data

POWER SOURCE	FLEX 330 XMS/XMI	FLEX 400 XMS/XMI	FLEX 500 XMS/XMI
Mains voltage	3 x 400	3 x 400	3 x 400
Fuse	16 A	20 A	35 A
Open circuit consumption	35 Watt	35 Watt	35 Watt
Maximum current	19.8 A	25.7 A	44,9 A
Efficiency	0.99	0.99	0.99
Open circuit voltage MMA	80 - 85 V	80 - 85 V	90 - 95 V
Duty cycle, 100% at 40°	250 A	300 A	400 A
Duty cycle, 100% at 20°	270 A	330 A	500 A
Duty cycle, 60% at 40°	280 A	350 A	450 A
Duty cycle, 60% at 20°	300 A	400 A	-
Current range DC	40 - 330 A	40 - 400 A	40 - 400 A
Application class	S	S	S
Protection class	IP 23	IP 23	IP 23
Norm	EN/IEC60974-1 EN/IEC60974-10	EN/IEC60974-1 EN/IEC60974-10	EN/IEC60974-1 EN/IEC60974-10
Dimensions L x W x H	72 x 28 x 54 cm	72 x 28 x 54 cm	72 x 28 x 54 cm
Weight (incl. supply cable)	58 kg	58 kg	59 kg

WIRE FEED UNITS	MWF 15	MWF 25	MPF 10 (intermediary station)
Connection voltage	42 VAC +/- 15%	42 VAC +/- 15%	0 - 40 VDC
Connection power	175 W	175 W	
Duty cycle, 60%	550 A	550 A	550 A
Wire feed speed	1 - 24 m/min.	1 - 24 m/min.	1 - 24 m/min.
Wire reel diameter	300 mm	300 mm	
Wire diameter	0.6 - 2.4 mm	0.6 - 2.4 mm	0.6 - 2.4 mm
Protection class	IP 23	IP 23	IP 23
Dimensions L x W x H	68 x 22 x 49 cm	37 x 27.5 x 23,5 cm	53 x 28 x 19.5 cm
Weight	22 kg	12.7 kg	11.6 kg

COOLING UNIT	MCU 1250
Connection voltage	400 V +/- 15 %
Max. open circuit consumption	5 W
Cooling power	1250 W
Tank volume	4 l
Flow at 1.2 bar/60°C	1.75 l/min.
Max. pressure	2.5 - 3.0 bar
Norm	EN/IEC60974-2
Dimension H x W x L	70 x 30 x 22 cm
Weight (excl. cooling liquid)	16 kg

We reserve the right to make changes.

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MIGATRONIC

FLEX 330/400 & FLEX 500

THE EASY AND PRECISE CHOICE OF WELDING MACHINE



“Switch on,
press and
weld”

FLEX XMS
without pulse
for synergic
MIG or MMA
welding

FLEX XMI for
synergic MIG
pulse in all
materials

FLEX XMI Auto,
the auto-
makers’
preferred all-
round machine

Future safe-
guarded
options

FLEX XMI with
DPC® - Dynamic
Pulse Control

The FLEX 400 XMS with MWF 15 wire feed unit, cooling unit and 3 m MV 450 torch.

FLEX 330/400/500 XMS - an allround workhorse for quality welding without pulse

You have never seen such user-friendly options combined in one welding machine

The FLEX 330/400/500 XMS is Migatronik's third generation of workhorses with inverter power source. Without pulse and with synergic one-knob control of the most important parameter settings, the FLEX XMS is the safe choice for both manual programming, synergic MIG and MMA welding all materials; from mild steel to stainless and aluminium. The FLEX XMS has been developed for quality welding operations according to welding procedures using all kinds of solid and gas protected flux cored wires.



MIG/MAG welding.



The FLEX XMS control panel with overlay foil and digital reading of key parameters.

A view into the MWF 15 wire feed unit.



Migatronik's portable and compact MWF 25.

"Switch on, press and weld", the Migatronik vision about user-friendly control, has been made even more visible in the FLEX 330/400/500 range: the control panel is equipped with a detachable overlay foil describing the 10 most frequently used standard programmes of the machine available on the individual inset card.

From the control panel it is possible to set all parameters, but from the synergic one-knob control on the torch handle it is also possible to set the most important parameters as well as sequence control several welding parameters. All synergic parameters are adjustable and can be transferred from programme to programme, such as choke, slope and crater-filling.

Separate wire feed unit

The FLEX 330/400/500 XMS is supplied with a separate, detachable wire feed unit, either closed MWF 15 or compact MWF 25. Both wire feed units are fitted with the stable four-roll wire feed system making it possible to weld up to 50 m from the power source. The XMS is available with intermediary station, yard unit for 5 kilogram wire coils and push-pull torch for safe feeding of soft wire types.

Future-safeguarding

The FLEX 330/400/500 XMS is for high quality welding operations in the workshop or from the service van without use of pulse. If required, the future-safeguarded software will allow the welder to upgrade the welding machine to pulse welding.

The multitude of options

The XMS generation is supplied for air-cooled or water-cooled torches and a standby function for the benefit of the environment and the life of the machine is standard equipment.

The FLEX 330/400/500 XMS is approved for outdoor work and power can be supplied from an asynchronous diesel power generator.

The large range of accessories includes: relief arm, push-pull kit, intermediary station, autotrafo, different types of trolleys, etc.

The XMS versions can be used along with Migatronik InfoWeld for continuous documentation of the welding operation with printout or storage on pc.

SPECIALS

- "Switch on, press and weld". It is as simple as that
- Manual programming, synergic MIG or MMA welding
- Synergic one-knob control from the torch handle
- Possibility of user's own programmes
- Mild steel, stainless or aluminium with all types of wires
- Upgradeable to pulse welding



Welding a wheel house

FLEX 330/400/500 XMI, specifically for stainless, aluminium alloys and MIG brazing

Also the safe choice of MIG pulse for documentation and automatization

The FLEX 330/400/500 XMI is the flexible and intelligent welding machine for both pulse, synergic MIG and MMA welding. Developed specifically for stainless steel, aluminium and aluminium alloys, but also suitable for MIG brazing high tensile steels with primed or galvanised surfaces. Being a stepless adjustable power inverter with synergic one-knob control of the most important settings and sequence control of several welding parameters through the torch, the FLEX XMI combines flexibility with welding quality and user-friendliness.

The FLEX XMI holds up to 50 welding programmes; a combination of Migatron's programme library, user's own programmes and adjustment of factory settings. Continuous updating of the programme package is also possible.

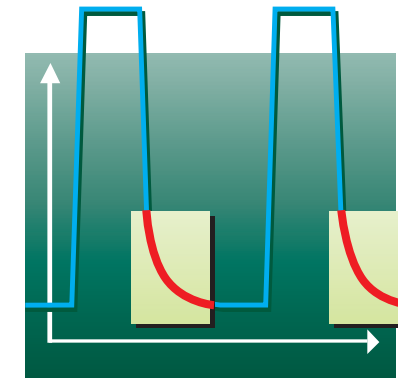


Two FLEX XMI machines with robot interface and Fanuc robots.



FLEX XMI without overlay foil ready for use.

DPC® (Dynamic Pulse Control) function ensures a stable arc, excellent penetration and a minimum of weld spatter.



Free, safe choice

The detachable overlay foil on the control panel shows the 10 most frequently used programmes and reflects the user-friendliness of the machine. Programmes are chosen by means of the individual inset card and the overlay foil does not prevent access to the remaining programmes. It is like a library: the welder has free access from shelves but puts in his carrier bag only what he actually needs. All synergic parameters are adjustable and can be transferred from programme to programme, such as pulse, choke, slope and crater-filling.

Dynamic Pulse Control

The FLEX XMI machines are equipped with the revolutionary DPC®, Dynamic Pulse Control, setting new standards in pulse welding along with the programme control unit. The secret behind DPC® is the precise control of the arc energy. The arc is stable in all pulse programmes, and especially when it comes to welding thin stainless or aluminium workpieces, the DPC® function gives better welding quality.

Owing to its precise parameter settings and uniform heat input the FLEX XMI complies with welding procedures, and weld spatter is reduced to a minimum owing to synergic MIG pulse in all materials.

The FLEX 330/400/500 is supplied with a separate, detachable wire feed unit, either closed MWF 15 or compact MWF 25. Both wire feed units are fitted with the stable four-roll wire feed system making it possible to weld up to 50 m from the power source.



The Migatron MPF 10 intermediary station with sliding bracket for large working range.

The multitude of options

The FLEX 330/400/500 range is the third generation of Migatron workhorses with inverter power source, and the XMI version is the safe choice of welding machine when it comes to use of MIG or MIG pulse in connection with documentation and automatization.

The XMI version is supplied for air-cooled or water-cooled torches and a standby function for the benefit of the environment and the life of the machine is standard equipment. The FLEX 330/400 range is approved for outdoor work and power can be supplied from an asynchronous diesel power generator.

The large range of accessories includes: relief arm, push-pull kit, intermediary station, autotrafo, different types of trolleys, etc.

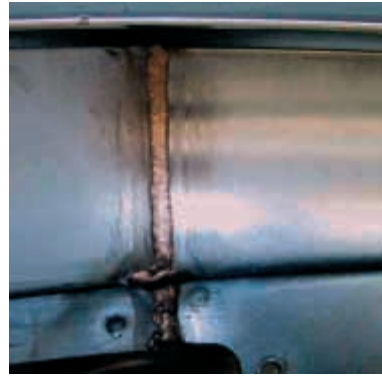


The push-pull torch for welding with soft wires.

SPECIALS

- "Switch on, press and weld"
- Synergic MIG pulse in all materials
- Synergic one-knob control of settings from the torch handle
- Suitable for MIG brazing high tensile steels with primed or galvanised surfaces
- Future-safe-guarded programme package
- Possibility of user's own programmes

FLEX 330 Auto - the MIG brazing specialist for the automotive industry



Repair of side member by means of MIG brazing.

Many year's co-operation with international and leading auto manufacturers, such as GM, Peugeot, Citroën, VW, Daimler-Chrysler and Ferrari, has established Migatronik's position as the welding specialist of the automotive industry. The increased use of aluminium and high tensile steels with primed or galvanised surfaces makes heavy demands on joining methods maintaining optimum corrosion and strength properties and reducing post-treatment to a minimum.

The FLEX 330 Auto masters traditional CO₂ welding, pulse welding and MIG brazing, and auto manufacturers prefer this approved welding machine for their importers' car body repair shops.

The FLEX 330 Auto is used in "multi-purpose" repair shops as an allround machine for body and container construction as well as light industry welding operations or as a special welding machine with programme package for individual car makes.



FLEX AUTO - the obvious choice for cars with aluminium car body.

The newly developed, detachable overlay foil provides the welder with an overview of the 10 most frequently used programmes and quick access to the other programmes. It is also possible for the welder to choose his own programmes.

From the synergic one-knob control on the torch handle it is possible to set the most important parameters and to sequence control several welding parameters. Separate wire feed unit - large working range.

SPECIALS

- "Switch on, press and weld"
- Masters CO₂ welding, pulse and MIG brazing
- The auto-maker's approved choice
- FLEX 330 Auto - also for coated electrodes
- Future-safe-guarded programme package

Programmes

XMI	XMS	Symbol	Wire Diameter	Gas	Waveform
1	1	Fe	0.8 mm	CO ₂	
2	2	Fe	0.8 mm	Ar/CO ₂	
3	3	Fe	1.0 mm	CO ₂	
4	4	Fe	1.0 mm	Ar/CO ₂	
5	5	Fe	1.2 mm	CO ₂	
6	6	Fe	1.2 mm	Ar/CO ₂	
7	7	Fe	1.6 mm	Ar/CO ₂	
8	8	Fe	0.8 mm	Ar/CO ₂	
9		Fe	1.0 mm	Ar/CO ₂	
10		Fe	1.2 mm	Ar/CO ₂	
11		Fe	1.6 mm	Ar/CO ₂	
12		CrNi	0.8 mm	Ar/CO ₂	
13	13	CrNi	1.0 mm	Ar/CO ₂	
14	14	CrNi	1.2 mm	Ar/CO ₂	
15	15	CrNi	1.6 mm	Ar/CO ₂	
16	16	CrNi	0.8 mm	Ar/CO ₂	
17		CrNi	1.0 mm	Ar/CO ₂	
18		CrNi	1.2 mm	Ar/CO ₂	
19		CrNi	1.6 mm	Ar/CO ₂	
20		CrNi	1.0 mm	Ar	
21	21	AlSi 3-5	1.2 mm	Ar	
22	22	AlSi 3-5	1.6 mm	Ar	
23	23	AlSi 3-5	1.0 mm	Ar	
24		AlSi 3-5	1.2 mm	Ar	
25		AlSi 3-5	1.6 mm	Ar	
26		AlMg 3-5	1.0 mm	Ar	
27	27	AlMg 3-5	1.2 mm	Ar	
28	28	AlMg 3-5	1.6 mm	Ar	
29	29	AlMg 3-5	1.0 mm	Ar	
30		AlMg 3-5	1.2 mm	Ar	
31		AlMg 3-5	1.6 mm	Ar	
32		AlMg 3-5	1.0 mm	Ar	
33	33	Fe Flux/metal	1.2 mm	Ar/CO ₂	
34	34	Fe Flux/metal	1.6 mm	Ar/CO ₂	
35	35	Fe Flux/rutile	1.2 mm	Ar/CO ₂	
36	36	Fe Flux/rutile	1.6 mm	Ar/CO ₂	
37	37	CrNi/flux	1.2 mm	CO ₂	
38	38	CrNi/flux	1.6 mm	Ar/CO ₂	
39	39	CrNi/flux	1.2 mm	CO ₂	
40	40	CrNi/flux	1.6 mm	Ar/CO ₂	
41	41	Fe Flux/metal with Ni	1.2 mm	Ar/CO ₂	
42		AlSi 12	1.0 mm	Ar	
43		AlSi 12	1.2 mm	Ar	
44		CuAl 8	1.0 mm	Ar	
45		CuAl 8	1.2 mm	Ar	
46		CuSi 3	1.0 mm	Ar	
47		CuSi 3	1.0 mm	Ar	
48		Super Duplex	1.0 mm	Ar/He	

AUTO	Symbol	Wire Diameter	Gas	Waveform
1	Fe SG 2/SG 3	0.6 mm	CO ₂	
2	Fe SG 2/SG 3	0.6 mm	Ar/CO ₂	
3	Fe SG 2/SG 3	0.8 mm	CO ₂	
4	Fe SG 2/SG 3	0.8 mm	Ar/CO ₂	
5	Fe SG 2/SG 3	1.0 mm	Ar/CO ₂	
6	Fe SG 2/SG 3	1.0 mm	Ar/CO ₂	
7	CuSi 3 MIG brazing	0.8 mm	Ar	
8	CuSi 3 MIG brazing	0.8 mm	Ar	
9	CuSi 3 MIG brazing	1.0 mm	Ar	
10	CuSi 3 MIG brazing	1.0 mm	Ar	
11	CuAl 8 MIG brazing	0.8 mm	Ar	
12	CuAl 8 MIG brazing	0.8 mm	Ar	
13	CuAl 8 MIG brazing	1.0 mm	Ar	
14	CuAl 8 MIG brazing	1.0 mm	Ar	
15	AlSi 5	1.0 mm	Ar	
16	AlSi 5	1.2 mm	Ar	
17	AlSi 12	1.0 mm	Ar	
18	AlSi 12	1.2 mm	Ar	
19	AlMg 5	1.0 mm	Ar	
20	AlMg 5	1.2 mm	Ar	
21	316 Lsi	0.8 mm	Ar/CO ₂	
22	316 Lsi	1.0 mm	Ar/CO ₂	

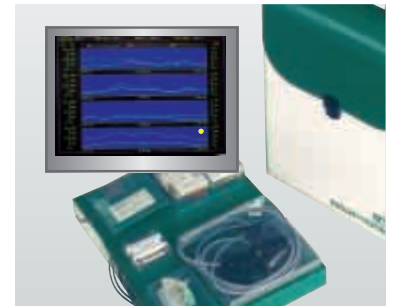
Accessories



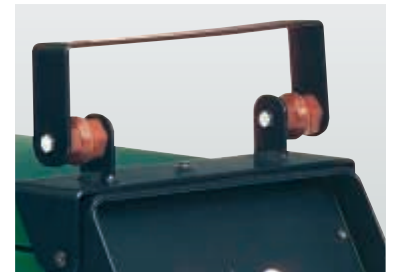
Torch holder.



Sliding bracket with wheels for MWF 15.



Infoweld for documentation.



Suspension kit for conveyor roller.



Complete range of accessories - please contact your local Migatronik dealer.